As against this considerable amount of indebtedness there has not been so far any *direct* return, but the indirect return and increase of values in the country are believed to be very much greater than the amount expended.

As respects the Canadian Pacific Railway the result of the surveys are published in the report of the Chief Engineer (1877.)

The surveys cover a period of six years, at a cost to the Government of $3,136,615.75, and they may, in themselves, be called a marvel of their kind. They have established, not only the perfect feasibility, but the fact of an extremely satisfactory line, from the head of St. Lawrence navigation, on Lake Superior, to the Tête Jaune Cache, on the western side of the great Continental "divide" in the main Rocky Mountain chain. This pass has been before described by Mr. Fleming, as the "gate" of the Rocky Mountains. Its highest point of elevation is 3,626 feet above the sea, against 8,242, the highest level actually traversed by the Union and Central Pacific Railway from Omaha to San Francisco. That is, an altitude of much more than double that of the Tête Jaune or Yellow Head Pass. This is, however, only a small part of the advantages of the Canadian line in respect to altitudes, actually successfully traversed by the American line. The length of the various lines surveyed and routes explored by the Engineering staff of Mr. Fleming is 46,000 miles, of which no less than 11,500 miles have been laboriously measured, yard by yard.

The Canadian line is out of all comparison in a more favourable position for cheap transportation than the Union and Central Pacific now in actual operation in the United States. There is no gradient in either direction between the Lake Superior terminus and the Tête Jaune Cache on the west side of the Rocky Mountains exceeding 1 per 100 or 52.8 feet per mile, and, with one single exception, at the crossing of South Saskatchewan, the heaviest gradient ascending eastward from a point near Battleford to Fort William is only 0.5 per hundred, or 26.4 per mile; and this location may be revised.

As far as regards snow obstructions it appears, from tables compiled by Professor Kingston, from three years observations in the Rocky Mountains, that in some of the passes and river valleys snow may average from four to five feet in depth, but in the general fall the average is far below that of Ottawa, Quebec and Montreal; while east of the Rocky Mountains, between Jasper Valley and Edmonton, it does not much exceed half that of Ottawa. With respect to the cold, though the autumn is more severe in the Rocky Mountain district than in Ontario, Quebec and the Maritime Provinces, yet the winter itself compares favourably with Eastern Canada. On other portions of the line the general snow fall is less than that of Ottawa.